

Site No. 9

STONE BRIDGE TIVERTON

Tiverton
State Route 77 (Main Road)



STONE BRIDGE TIVERTON

Site Description

Located along State Route 77 (Main Road) in Tiverton, the Stone Bridge site consists of a small public beach (Grinnell's Beach) and the abutment remains of the old Stone Bridge, which formerly connected the towns of Portsmouth and Tiverton across the upper reach of the Sakonnet River. Though the bridge itself was destroyed in the hurricane of 1954, both masonry abutments still remain and are currently in a dilapidated condition. This municipally-owned site is renowned for the quality fishing offered along the straight between the Sakonnet River and Mount Hope Bay to the north. While fenced off and posted for no fishing, the Stone Bridge abutment is still accessible and occasionally used for this purpose. More popular fishing spots at the site consist of the beach shoreline and the large armor stone along the channel end of the abutment.

Location Assessment

Bay Location. The site is located along the Tiverton coastline at the upper reach of the Sakonnet River. The narrow channel between bridge abutments is characterized by relatively deep waters (see nautical chart image) and swift currents during tidal shifts. While not assessed for aquatic life support use in the *State of the State's Waters Report*, these waters are permanently closed to shellfishing and have been assigned a water quality goal of SB by the RIDEM (see Appendix B). From the Online Recreational Fishing Survey, common catch along the mid and upper Sakonnet River consists of Striped Bass, Bluefish, Tautog, and Scup, all of which were reported present spring through fall.



In addition to fishing, water use at the site is primarily associated with (a) the navigation channel through the bridge opening and (b) Grinnell's Beach along the southerly side of the bridge abutment. As a gateway between the Sakonnet River and Mount Hope Bay, the Stone Bridge Channel is subject to moderate use by recreational and light commercial boating, both observed during the site visit. Immediately north of the bridge, the Tiverton Basin is host to Tiverton Town Landing, recreational mooring areas, and several dock facilities along both the Tiverton and Portsmouth shorelines (see Photo 8). Grinnell's Beach is a town-operated facility supporting swimming and other typical beach uses (Photos 1, 4, 5A, 5B) with a lifeguard on duty from 9 a.m. to 4 p.m. during the summer season. Kayaking was observed in the vicinity of the beach, and the posting of state regulations for personal watercraft (jet-skis) at the beach entrance would indicate that this activity also occurs in these waters.

Across the channel, the State-owned Stone Bridge abutment in Portsmouth and accompanying beach area currently offer similar recreational opportunities (fishing, beach-going, etc.). In conjunction with the RIDEM, the R.I. Department of Transportation (RIDOT) recently received funding approval (through the Transportation Enhancement Program - 2005 Call for Projects) for a project to redevelop Stone Bridge Portsmouth as public recreational facility. Future

improvements to this site will enhance active and passive recreational use, including improved fishing access.

Land Location. The site is located directly off of Main Road in Tiverton, approximately 1 mile south of the Route 24 freeway facility and Sakonnet River Bridge. The Town of Tiverton is primarily a rural community, with most development and non-residential use concentrated along the Sakonnet River coastline. State Route 77 serves as the arterial 2-lane roadway through this area, supporting a mix of light commercial, residential, and institutional uses. Land use in the immediate vicinity is mostly commercial: a gas station directly abuts the site (see Photo 5A) and a restaurant, convenience store, and medical office building are directly across the street. Though Tiverton and Little Compton are geographically removed from the rest of Rhode Island by the Sakonnet River, the site's proximity to Route 24 makes it fairly accessible to East Bay residents (Bristol, Newport Counties) as well as nearby southeast Massachusetts communities.

Environmental Constraints and Permitting. The abutments of the Stone Bridge serve as the demarcation between CRMC water classifications in the area: waters to the south are designated as Type 2 (Low-Intensity Use), while waters to the north are designated as Type 3 (High-Intensity Boating). Coastal features of the site consist of the abutment retaining wall along the north and channel sides of the structure and the beach (Grinnell's Beach) along the south side of the site. No known eel grass bed habitats are documented in this area.

Facilities Assessment

The most prominent feature of the Stone Bridge site is the existing masonry abutment, which along with the corresponding westerly abutment along the Middletown shoreline, defines the channel opening and provides protection for harbor uses to the north. As previously noted, this structure is in a deteriorating condition, currently fenced off to public access and posted for no trespassing (see Photos 2, 3). The partial failure of the northerly wingwall in 2000 (Photo 3) required the placement of a rip rap slope for temporary stabilization. Despite being posted for no trespassing, the abutment remains accessible through a narrow opening in the fence and is still occasionally used for fishing (as observed upon site visit). While structurally unsafe and in need of extensive rehabilitation, this structure offers good opportunity for casting along both sides near its channel end. The placement of armor stone along its westerly (channel) side effectively prohibits casting directly towards the boating channel from the abutment (Photo 9).

Fishing at the Stone Bridge Tiverton site is also inherently tied to Grinnell's Beach, as the beach parking lot offers ample capacity for both beach-going and recreational fishing uses (Photos 4, 7). While there is a nominal fee for parking at the site during lifeguard hours, fishing use of the site occurs primarily during the late afternoon / early evening hours when there is no fee for parking. Given that use of the bridge is prohibited, most anglers currently fish from the beach shoreline or the armor stone at the channel side of the abutment (Photos 7, 9). Beach and fishing uses appear to coexist well at this location; fishing at the site begins to increase in the evening just as beach use of the site begins to diminish after the end of lifeguard service at 4 p.m. The site is posted at the parking lot entrance as closed from ½ hour after sundown until sunrise, though regulars of the site noted that this is not always stringently enforced.

While currently exhibiting poor site aesthetics, the beach/park site does provide some amenities conducive to fishing, including picnic benches along the beach, several trash receptacles, ample shoreline to fish from, and parking immediately adjacent to shoreline fishing spots (Photos 5A, 5B, 7). Though no accessibility features are currently in place, one disabled angler interviewed at the time of site visit spoke favorably of the beach fishing area and its ease of handicap

usability (at-grade with the adjacent parking lot, minimal obstructions, etc.). A small restroom building is located on site (Photo 5B), however these facilities are open only during lifeguard hours.

Existing Site Conditions

	Poor	Fair	Good	Excellent
Existing Fishing Facilities			X	
Parking			X	
Compatibility with Surrounding Land / Water Uses			X	
Statewide Transportation Accessibility / Public Transit		X		
Site Aesthetics	X			
	Low	Medium	High	
Water Quality (see Appendix B)		X		

Priority for Capital Improvements: **Medium**

The Stone Bridge Tiverton site could readily benefit from capital investment to bring the quality of its infrastructure to a level commensurate with the high quality of fishing offered at this location. This could ostensibly be achieved through rehabilitation of the east abutment for fishing use as well as improvements to the condition and aesthetics of existing Grinnell's Beach facilities. It is also important to note the integral role of the existing east abutment in the hydraulics of the waterway, as it currently protects municipal harbor, mooring, and shoreline uses to the north. As this structure recently experienced more significant deterioration (failure of the northerly wingwall in 2000), the Town of Tiverton has recognized the need for its structural rehabilitation or replacement. In 2004 the town solicited professional engineering services to develop a preliminary design and cost estimate for this work; through this study it was determined that the estimated cost to rehabilitate of the Stone Bridge abutment structure is in the range of 2 million dollars. While the town has secured some grant monies for this work, currently available funds are well below the amount required to the satisfactorily rehabilitate the east abutment. Accordingly, plans for development have been temporarily deferred at this time.

In consideration of the above, it may be prudent for the State to consider investing in a project that could both (a) preserve the integrity of existing waterway hydraulics and anchorage uses of Tiverton Basin to the north and (b) enhance the public's access to and enjoyment of the quality fishing offered at the site. Fishing use of the site could be further augmented through surface improvements to the Grinnell's Beach area, including as parking refinement/resurfacing, landscaping, restrooms, and other amenities. As the overall cost for this work would undoubtedly be high, the potential development of the Stone Bridge Tiverton site may warrant further investigation, including a cost/benefit analysis, identification of other possible sources of funding, etc., as it is quite possible that public shoreline fishing access improvements could be more cost-effectively implemented at another location or locations within the State.



Photo 1. Entrance to Grinnell's Beach / Stone Bridge Site from Route 77.



Photo 2. Trespassing notice at the Stone Bridge abutment. The fencing is easily bypassed through an opening along the southerly (left) bridge railing.



Photo 3. Failed section of northerly wingwall that has been stabilized
By the placement of rip rap.



Photo 4. Grinnell's Beach parking area looking west from the entrance.



Photos 5A and 5B. Grinnell's Beach facilities, including restrooms and playground (left), benches and trash receptacles (right).



Photo 6. Navigation through Stone Bridge Channel. The west abutment in Portsmouth (background right) offers similar shoreline fishing opportunities.



Photo 7. Evening fishing along Grinnell's Beach looking southeast.



Photo 8 (left). Tiverton Town Landing and mooring area along northerly side of the bridge abutment. Fishing from this structure is prohibited.



Photo 9 (right). Fishing along armor stone at the channel end of the bridge abutment.